

CONTRACT FOR ALGAL TURF SCRUBBER[®] MOBILE PILOT INSTALLATION AND OPERATION

This contract is dated, made, and entered into as of the _____ day of _____, 20____, by the City of Durham (“City”) and Biohabitats, Inc. of North Carolina, P.C (“Contractor”), a corporation registered to do business in the State of North Carolina.

Sec. 1. Background and Purpose. The Falls Lake Nutrient Management Strategy requires large reductions of nitrogen and phosphorus (i.e., nutrients) from the City of Durham. The Public Works Department identified the Algal Turf Scrubber[®] nutrient removal system as a technology that has the potential to remove nitrogen and phosphorus at cost lower than that of traditional structural stormwater control measures. A feasibility study was conducted to consider Algal Turf Scrubber and City of Durham conditions that concluded that this technology could potentially, provide significant and cost-effective nutrient removal for the City. The Public Works Department decided this technology offered enough potential cost-benefit to move forward with a pilot study.

Sec. 2. Services and Scope to be Performed. Presumption that Duty is Contractor’s. The Contractor shall evaluate the performance of the Algal Turf Scrubber[®] Mobile Pilot System for nutrient removal in a City of Durham watershed draining to Falls Lake. As part of this pilot study, the Contractor shall include a complete compilation and analysis of the system performance data in order to prepare a system design, and also provide system performance and harvesting/composting projections for a conceptual full-scale facility. The Contractor shall attend meetings, prepare reports, and meet project milestones. The detailed tasks and deliverables for the work to be performed are provided in Exhibit A, “Scope of Work”.

In this contract, “Work” means the services that the Contractor is required to perform pursuant to this contract and all of the Contractor’s duties to the City that arise out of this contract. Unless the context requires otherwise, if this contract states that a task is to be performed or that a duty is owed, it shall be presumed that the task or duty is the obligation of the Contractor.

Sec. 3. Schedule of Performance and Term. This Contract will be effective upon execution by both parties and will expire upon completion of the services and payment by the City.

Sec. 4. Complete Work without Extra Cost. Except to the extent otherwise specifically stated in this contract, the Contractor shall obtain and provide, without additional cost to the City, all labor, materials, equipment, transportation, facilities, services, permits, and licenses necessary to perform the Work.

Sec. 5. Contractor’s Billings to City. Compensation. The Contractor shall send invoices to the City on a monthly basis for the amounts to be paid pursuant to this contract. Each invoice shall document the work completed during the billing cycle, to the reasonable satisfaction of the City. This includes a monthly status report along with the invoice that summarizes the work progress, updated schedule, and a description of any contract issues and their resolution. Within twenty days after the City receives an invoice, the City shall send the Contractor a check in payment for all undisputed amounts contained in the invoice.

The City shall pay the Contractor for the Work on a time and materials basis not to exceed a total amount of **\$358,540.00**. The City shall not be obligated to pay the Contractor any payments, fees, expenses, or compensation other than those authorized by this contract section.

Sec. 6. Prompt Payment to Subcontractors. (a) Within 7 days of receipt by the Contractor of each payment from the City under this contract, the Contractor shall pay all Subcontractors (which term includes subconsultants and suppliers) based on work completed or service provided under the subcontract. Should any payment to the Subcontractor be delayed by more than 7 days after receipt of payment by the Contractor from the City under this contract, the Contractor shall pay the Subcontractor interest, beginning on the 8th day, at the rate of 1% per month or fraction thereof on such unpaid balance as may be due. By appropriate litigation, Subcontractors shall have the right to enforce this subsection (a) directly against the Contractor, but not against the City of Durham.

(b) If the individual assigned to administer this contract for the City (in this section, titled “Prompt Payment to Subcontractors,” he or she will be referred to as the “Project Manager”) determines that it is appropriate to enforce subsection (a) in this manner, the City may withhold from progress or final payments to the Contractor the sums estimated by the Project Manager to be

- (i) the amount of interest due to the Subcontractor under subsection (a), and/or
- (ii) the amounts past-due under subsection (a) to the Subcontractor but not exceeding 5% of the payment(s) due from the City to the Contractor.

This subsection (b) does not limit any other rights to withhold payments that the City may have.

(c) Nothing in this section (titled “Prompt Payment to Subcontractors”) shall prevent the Contractor at the

time of invoicing, application, and certification to the City from withholding invoicing, application, and certification to the City for payment to the Subcontractor for unsatisfactory job progress; defective goods, services, or construction not remedied; disputed work; third-party claims filed or reasonable evidence that such a claim will be filed; failure of the subcontractor to make timely payments for labor, equipment, and materials; damage to the Contractor or another subcontractor; reasonable evidence that the subcontract cannot be completed for the unpaid balance of the subcontract sum; or a reasonable amount for retainage not to exceed 10%.

(d) The Project Manager may require, as a prerequisite to making progress or final payments, that the Contractor provide statements from any Subcontractors designated by the Project Manager regarding the status of their accounts with the Contractor. The statements shall be in such format as the Project Manager reasonably requires, including notarization if so specified.

Sec. 7. Insurance.

The Contractor shall purchase and maintain insurance coverage for not less than the following:

Commercial General Liability, covering:

- Premises/operations
- Products/completed operations (two years minimum, from project completion)
- Broad form property damage
- Contractual liability
- Independent contractors, if any are used in the performance of this contract
- City of Durham must be named additional insured, and an original of the endorsement to effect the coverage must be attached to the certificate (if by blanket endorsement, then agent may so indicate in the GL section of the certificate, in lieu of an original endorsement)
- Combined single limit not less than \$1,000,000 per occurrence, with an annual aggregate on not less than \$2,000,000.

Commercial Auto Liability, covering:

- Symbol 1, all vehicles
- Combined single limit of \$2,000,000
- City of Durham must be named additional insured

Professional Liability, covering:

- Covering claims arising out of professional advisement / consultation services performed in connection with this contract
- Combined single limit not less than \$1,000,000 per occurrence; if coverage is only available on claims made basis, then additional coverage requirements may apply, subject to review of City Finance Director

Workers' Compensation Insurance, covering:

- Statutory benefits;
- Covering employees; covering owners partners, officers, and relatives (who work on this contract) (this must be stated on the certificate)
- Employers' liability, \$1,000,000
- Waiver of subrogation in favor of the City of Durham

Insurance shall be provided by:

- Companies authorized to do business in the State of North Carolina
- Companies with Best rating of A-, VII or better.

Insurance shall be evidenced by a certificate:

- Providing notice to the City of not less than 30 days prior to cancellation or reduction of coverage
- Certificates shall be addressed to:
City of Durham, Public Works Department
Attention: Danielle Mir – Stormwater & GIS Services
101 City Hall Plaza
Durham, NC 27701

Sec. 8. Performance of Work by City. If the Contractor fails to perform the Work in accordance with the schedule referred to in Section 3 above, the City may, in its discretion, in order to bring the project closer to the schedule, perform or cause to be performed some or all of the Work, and doing so shall not waive any of the City's rights and remedies. Before doing so, the City shall give the Contractor notice of its intention. The Contractor shall reimburse the City for additional costs incurred by the City in exercising its right to perform or cause to be performed some or all of the Work pursuant to this section.

Sec. 9. Exhibits. The following exhibits are made a part of this contract:

Exhibit A. Scope of Work.

In case of conflict between an exhibit and the text of this contract excluding the exhibit, the text of this contract shall control.

Sec. 10. Notice. (a) All notices and other communications required or permitted by this contract shall be in writing and shall be given either by personal delivery, fax, UPS, Federal Express, or certified United States mail, return receipt requested, addressed as follows. The parties are requested to send a copy by email.

To the City:

Danielle Mir

City of Durham, Public Works Department

101 City Hall Plaza

Durham, NC 27701-3329

The fax number is (919)560-4316.

Email: danielle.mir@durhamnc.gov

To the Contractor:

Kevin Nunnery

Biohabitats, Inc. of North Carolina, P.C.

8218 Creedmoor Road, Suite 200, Raleigh, NC 27613

The fax number is 410-554-0168.

Email: knunnery@Biohabitats.com

(b) Change of Address. Date Notice Deemed Given. A change of address, fax number, or person to receive notice may be made by either party by notice given to the other party. Any notice or other communication under this contract shall be deemed given and sent at the time of actual delivery, if it is personally delivered or sent by fax. If the notice or other communication is sent by United States mail, it shall be deemed given upon the third calendar day following the day on which such notice or other communication is deposited with the United States Postal Service or upon actual delivery, whichever first occurs.

Sec. 11. Indemnification. (a) To the maximum extent allowed by law, the Contractor shall defend, indemnify, and save harmless Indemnitees from and against all Charges that arise in any manner from, in connection with, or out of this contract as a result of acts or omissions of the Contractor or subcontractors or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. In performing its duties under this subsection "a," the Contractor shall at its sole expense defend Indemnitees with legal counsel reasonably acceptable to City. (b) Definitions. As used in subsections "a" above and "c" below -- "Charges" means claims, judgments, costs, damages, losses, demands, liabilities, duties, obligations, fines, penalties, royalties, settlements, and expenses (included without limitation within "Charges" are (1) interest and reasonable attorneys' fees assessed as part of any such item, and (2) amounts for alleged violations of sedimentation pollution, erosion control, pollution, or other environmental laws, regulations, ordinances, rules, or orders -- including but not limited to any such alleged violation that arises out of the handling, transportation, deposit, or delivery of the items that are the subject of this contract). "Indemnitees" means City and its officers, officials, independent contractors, agents, and employees, excluding the Contractor. (c) Other Provisions Separate. Nothing in this section shall affect any warranties in favor of the City that are otherwise provided in or arise out of this contract. This section is in addition to and shall be construed separately from any other indemnification provisions that may be in this contract. (d) Survival. This section shall remain in force despite termination of this contract (whether by expiration of the term or otherwise) and termination of the services of the Contractor under this contract. (e) Limitations of the Contractor's Obligation. If this section is in, or is in connection with, a contract relative to the design, planning, construction, alteration, repair or maintenance of a building, structure, highway, road, appurtenance or appliance, including moving, demolition and excavating connected therewith, then subsection "a" above shall not require the Contractor to indemnify or hold harmless Indemnitees against liability for damages arising out of bodily injury to persons or damage to property proximately caused by or resulting from the negligence, in whole or in part, of Indemnitees.

Sec. 12. Miscellaneous

(a) Choice of Law and Forum; Service of Process. (i) This contract shall be deemed made in Durham County, North Carolina. This contract shall be governed by and construed in accordance with the law of North Carolina. The exclusive forum and venue for all actions arising out of this contract shall be the North Carolina General Court of Justice, in Durham County. Such actions shall neither be commenced in nor removed to federal court. This subsection (a) shall not apply to subsequent actions to enforce a judgment entered in actions heard pursuant to this subsection. (ii) If the Contractor is not a natural person (for instance, the Contractor is a corporation or limited liability company), this subsection (ii) applies. "Agent for Service of Process" means every person now or hereafter appointed by the Contractor to be served or to accept service of process in any State of the United States. Without excluding any other method of service authorized by law, the Contractor agrees that every Agent for Service of Process is designated as its non-exclusive agent for service of process, summons, and complaint. The Contractor will instruct each Agent for Service of Process that after such agent receives the process, summons, or complaint, such agent shall promptly send it to the Contractor. This subsection (ii) does not apply while the Contractor maintains a registered agent in North Carolina with the office of the N. C. Secretary of State and such registered agent can be found with due diligence at the registered office.

(b) Waiver. No action or failure to act by the City shall constitute a waiver of any of its rights or remedies that arise out of this contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

(c) Performance of Government Functions. Nothing contained in this contract shall be deemed or construed so as to in any way estop, limit, or impair the City from exercising or performing any regulatory, policing, legislative, governmental, or other powers or functions.

(d) Severability. If any provision of this contract shall be unenforceable, the remainder of this contract shall be enforceable to the extent permitted by law.

(e) Assignment. Successors and Assigns. Without the City's written consent, the Contractor shall not assign (which includes to delegate) any of its rights (including the right to payment) or duties that arise out of this contract. The City Manager may consent to an assignment without action by the City Council. Unless the City otherwise agrees in writing, the Contractor and all assignees shall be subject to all of the City's defenses and shall be liable for all of the Contractor's duties that arise out of this contract and all of the City's claims that arise out of this contract. Without granting the Contractor the right to assign, it is agreed that the duties of the Contractor that arise out of this contract shall be binding upon it and its heirs, personal representatives, successors, and assigns.

(f) Compliance with Law. In performing all of the Work, the Contractor shall comply with all applicable law.

(g) Notice of City Policy. THE CITY OPPOSES DISCRIMINATION ON THE BASIS OF RACE AND SEX AND URGES ALL OF ITS CONTRACTORS TO PROVIDE A FAIR OPPORTUNITY FOR MINORITIES AND WOMEN TO PARTICIPATE IN THEIR WORK FORCE AND AS SUBCONTRACTORS AND VENDORS UNDER CITY CONTRACTS.

(h) EEO Provisions. During the performance of this Contract the Contractor agrees as follows: (1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. The Contractor shall take affirmative action to insure that applicants are employed and that employees are treated equally during employment, without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. Such action shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth these EEO provisions. (2) The Contractor shall in all solicitations or advertisement for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. (3) The Contractor shall send a copy of the EEO provisions to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding. (4) In the event of the Contractor's noncompliance with these EEO provisions, the City may cancel, terminate, or suspend this contract, in whole or in part, and the City may declare the Contractor ineligible for further City contracts. (5) Unless exempted by the City Council of the City of Durham, the Contractor shall include these EEO provisions in every purchase order for goods to be used in performing this contract and in every subcontract related to this contract so that these EEO provisions will be binding upon such subcontractors and vendors.

(i) SDBE. The Contractor shall comply with all applicable provisions of Article III of Chapter 18 of the Durham City Code (Equal Business Opportunities Ordinance), as amended from time to time. The failure of the Contractor to comply with that article shall be a material breach of contract which may result in the rescission or

termination of this contract and/or other appropriate remedies in accordance with the provisions of that article, this contract, and State law. The Participation Plan submitted in accordance with that article is binding on the Contractor. Section 18-59(f) of that article provides, in part, "If the City Manager determines that the Contractor has failed to comply with the provisions of the Contract, the City Manager shall notify the Contractor in writing of the deficiencies. The Contractor shall have 14 days, or such time as specified in the Contract, to cure the deficiencies or establish that there are no deficiencies." It is stipulated and agreed that those two quoted sentences apply only to the Contractor's alleged violations of its obligations under Article III of Chapter 18 and not to the Contractor's alleged violations of other obligations.

(j) No Third Party Rights Created. This contract is intended for the benefit of the City and the Contractor and not any other person.

(k) Principles of Interpretation and Definitions. (1) The singular includes the plural and the plural the singular. The pronouns "it" and "its" include the masculine and feminine. References to statutes or regulations include all statutory or regulatory provisions consolidating, amending, or replacing the statute or regulation. References to contracts and agreements shall be deemed to include all amendments to them. The words "include," "including," etc. mean include, including, etc. without limitation. (2) References to a "Section" or "section" shall mean a section of this contract. (3) "Contract" and "Agreement," whether or not capitalized, refer to this instrument. (4) "Duties" includes obligations. (5) The word "person" includes natural persons, firms, companies, associations, partnerships, trusts, corporations, governmental agencies and units, and other legal entities. (6) The word "shall" is mandatory. (7) The word "day" means calendar day. (8) The word "Work" is defined in Section 2. (9) A definition in this contract will not apply to the extent the context requires otherwise.

(l) Modifications. Entire Agreement. A modification of this contract is not valid unless signed by both parties and otherwise in accordance with requirements of law. Further, a modification is not enforceable against the City unless it is signed by the City Manager, a deputy or assistant City Manager, or, in limited circumstances, a City department director. This contract contains the entire agreement between the parties pertaining to the subject matter of this contract. With respect to that subject matter, there are no promises, agreements, conditions, inducements, warranties, or understandings, written or oral, expressed or implied, between the parties, other than as set forth or referenced in this contract.

(m) City's Manager's Authority. To the extent, if any, the City has the power to suspend or terminate this contract or the Contractor's services under this contract, that power may be exercised by City Manager or a deputy or assistant City Manager without City Council action.

Sec. 13. Termination for Convenience ("TFC"). (a) *Procedure.* Without limiting any party's right to terminate for breach, the parties agree that the City may, without cause, and in its discretion, terminate this contract for convenience by giving the Contractor written notice that refers to this section. TFC shall be effective at the time indicated in the notice. (b) *Obligations.* Upon TFC, all obligations that are still executory on both sides are discharged except that any right based on prior breach or performance survives, and the indemnification provisions and the section of this contract titled Trade Secrets and Confidentiality, if any, shall remain in force. At the time of TFC or as soon afterwards as is practical, the Contractor shall give the City all Work, including partly completed Work. In case of TFC, the Contractor shall follow the City's instructions as to which subcontracts to terminate. (c) *Payment.* The City shall pay the Contractor an equitable amount for the costs and charges that accrue because of the City's decisions with respect to the subcontracts, but excluding profit for the Contractor. Within 20 days after TFC, the City shall pay the Contractor one hundred dollars as a TFC fee and shall pay the Contractor for all Work performed except to the extent previously paid for. Work shall be paid for in accordance with the method (unit prices, hourly fees, etc.) to be used for payment had the Work been completed except to the extent it would be inequitable to either party, and if Work was to be paid for on a lump-sum basis, the City shall pay the part of the lump sum that reflects the percentage of completion attained for that Work. The Contractor shall not be entitled to any payment because of TFC except as stated in this section, whether on the basis of overhead, profit, damages, other economic loss, or otherwise.

Sec. 14. Trade Secrets; Confidentiality. The request for proposals (RFP) section titled "Trade Secrets and Confidentiality" shall apply to any Trade Secrets disclosed to the City during the process leading to the parties' entering into this Contract (including all of the Contractor's responses to the RFP). This section (titled "Trade Secrets; Confidentiality") shall remain in force despite termination of this contract (whether by expiration of the term or otherwise) and termination of the services of the Contractor under this contract. For purposes of this contract, the word "candidate" in the RFP section just cited shall mean the "Contractor."

Section 15. E-Verify Compliance. The contractor represents and covenants that the contractor and its subcontractors comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes (NCGS). The City is relying on this E-Verify Compliance section in entering into this contract. The parties agree to

this section only to the extent authorized by law. If this section is held to be unenforceable or invalid in whole or in part, it shall be deemed amended to the extent necessary to make this contract comply with NCGS 160A-20.1(b).

IN WITNESS WHEREOF, the City and the Contractor have caused this contract to be executed under seal themselves or by their respective duly authorized agents or officers.

ATTEST:

CITY OF DURHAM

_____ By: _____

preaudit certificate, if applicable _____

Biohabitats, Inc.

(Affix corporate seal)

By: _____

Title of officer: _____

State of _____ County of _____

I, a notary public in and for the aforesaid county and state, certify that _____ personally appeared before me this day and stated that he or she is (~~strike through the inapplicable:~~) chairperson/ president/ chief executive officer/ vice-president/ assistant vice-president/ treasurer/ chief financial officer of Biohabitats, Inc., a corporation registered to do business in North Carolina, and that by authority duly given and as the act of the corporation, he or she signed the foregoing contract with the City of Durham and the corporate seal was affixed to said instrument(s). This the _____ day of _____, 20_____.

My commission expires:

Notary Public

Exhibit A - Scope of Work

Algal Turf Scrubber® Mobile Pilot System Installation and Operation

The project goal is to conduct a freshwater nutrient removal pilot study using Algal Turf Scrubber® (“ATSTM”) Mobile Pilot Unit in the Falls Lake watershed south and east of Interstate 85. The completion of the ATSTM pilot study analysis will determine the system performance, harvesting with composting projections, and system design for a full-scale ATSTM system in Durham, along with a modified Algal Turf Scrubber Design Model (ATSTM DEM) runs, and present them along with a report.

The ATSTM Mobile Pilot study is divided into the following tasks:

1. Final Site Selection, Layout, and Design,
2. Development of an ATSTM Pilot Study Operation and Monitoring Plan, and a Demobilization Plan,
3. Permitting,
4. Installation of an ATSTM Mobile Pilot Unit,
5. Operation, Maintenance, Monitoring, and System Engineering of the ATSTM Mobile Pilot Unit,
6. ATSTM Mobile Pilot Unit Demobilization, and
7. ATSTM Mobile Pilot Unit Study Final Report.

Task 1. Final Site Selection, Layout, and Design

A project kick-off meeting will be held with the City coordinating team to discuss the scope and gather initial information regarding the pilot study. Additional project management duties to be performed by Biohabitats, Inc. include providing regular written project updates with invoices. Biohabitats, Inc. will work with the City of Durham, the US Army Corps of Engineers, and potentially Duke Energy, the NC Department of Transportation, and Durham County, to finalize a pilot study location with access to Falls Lake. Biohabitats, Inc. will:

1. Evaluate by desktop and in the field locations downstream of Interstate 85 and upstream of the Hickory Hill boat launch is most suitable in order to minimize impacts to game lands. Biohabitats will evaluate the borrow site, the power easement that runs along the south side of I-85, and another feasible location in the Ellerbe watershed be in close proximity to Falls Lake.
2. Prepare a site plan and design for the ATSTM Mobile Pilot Unit. The selected location will have suitable topography for installation of the mobile pilot unit, and provide adequate access for installation, operation and demobilization.
3. The site plan and design will include necessary site changes, including utility needs for installation and operation of the ATSTM Mobile Pilot Unit.
4. Be required to have a minimum of two meetings with City of Durham staff, and meetings with the ACOE, Duke Energy, Durham City-County Planning and potentially the NC Wildlife Resources Commission. Meetings involving City of Durham staff will occur at Durham City Hall.
5. Prepare meeting summaries and provide summaries to the City Project Manager within 10 business days.

Deliverables:

1. Biohabitats will obtain Durham City-County Planning site plan approval,

2. Provide layout and design of the ATSTTM Mobile Pilot Unit, including schematic drawings and site drawings showing equipment location, proposed intake and discharge, transmission of electricity, transmission of the intake and discharge water, and any other site modifications that may be required.
3. Provide a kickoff meeting and other meeting summaries to the City Project Manager.
4. Invoices will be provided monthly with a project status and complication summary by task.

Task 2. Development of ATSTTM Pilot Study Operation, Monitoring, and a Demobilization Plan.

Biohabitats, Inc. will prepare an operation, maintenance, and monitoring plan (“Operation, Maintenance, and Monitoring Plan”) for the ATSTTM Pilot Study:

1. The Operation, Maintenance, and Monitoring Plan will include the method of mobilization of the unit, intake rate, pulsing specifications, and harvesting procedures,
2. The Operation, Maintenance, and Monitoring Plan shall provide for the collection of data to demonstrate the ongoing operation and nutrient removal accomplished by the ATSTTM Mobile Pilot Unit. Monitoring shall include, but is not limited to, algae biomass, nutrients, metals, carbon and solids.
3. A demobilization plan, containing descriptions of methods required for preparation of the ATSTTM Mobile Pilot Unit for transport, and of utilities or other services that will need to be discontinued and removed, and of site restoration that may be needed (e.g., plantings, grading, seeding, etc.).

Deliverables:

1. Operation and Monitoring Plan, draft and final documents that have been internally reviewed by Biohabitats, Inc. technical writing specialist, and
2. Demobilization Plan, draft and final documents that have been internally reviewed by Biohabitats, Inc. technical writing specialist.

Task 3. Permitting

Biohabitats, Inc. will obtain any permits required for implementation of the ATSTTM Pilot Mobile Unit. The pilot study may require letters of permission from the NC DWR, the Army Corps, and the Wildlife Resources Commission for sites located within Falls Lake’s coves, and may not require a permit or registration for withdrawals of less than 100,000 gallons of water per day.

Biohabitats, Inc. will be:

1. Responsible for understanding and gathering all required state, federal and local permits, registrations, or permissions,
2. Upon direction from the City’s Project Manager prepare an Environmental Assessment (EA) to support any potential SEPA or NEPA requirements, as well as any other state requirements for water withdrawal and discharge from and to Falls Lake,
3. Obtain permits required for all improvements specified on the approved site plan (e.g. electrical),
4. Attend and document all required meetings and report to City Project Manager within 10 business days of such meetings.

Deliverables:

1. Produce Environmental Assessments if required,
2. Site plan approval,

3. Prepare all documentation necessary for DWR authorization,
4. Obtain and prepare all required permits, registrations, or permission,
5. Identify and provide documentation for all potential permits, registrations, and permissions required for implementation of a full scale facility, and
6. Provide all meeting summaries to City Project Manager within 10 business days of each meeting.

Task 4. Installation of ATSTTM Mobile Pilot Unit

Upon City of Durham approval and upon receipt of all required permits, registrations, or permissions by the Contractor, the ATSTTM Mobile Pilot Unit shall be transported from Ocala, Florida and installed at the site selected and permitted in Tasks 1 and 2. The installation will include all required pumping and piping equipment necessary to convey water from Falls Lake to the ATSTTM Mobile Pilot Unit and from the ATSTTM Mobile Pilot Unit to a stable, non-erosive outlet on Falls Lake. The ATSTTM Mobile Pilot Unit shall be installed as specified in the approved site plan. Design and operability of the system shall be confirmed.

Deliverables:

1. Installation of the ATSTTM Mobile Pilot Unit, and
2. Contractor shall obtain installation certification of the ATSTTM Mobile Pilot Unit from its subcontractor HydroMentia, Inc and provide this certification to the City Project Manager.

Task 5. Operation, Maintenance, Monitoring and System Engineering of the ATSTTM Mobile Pilot Unit

Biohabitats, Inc. will operate and monitor the ATSTTM Mobile Pilot Unit for a period of 12 months (52 weeks) in accordance with the Operation, Maintenance, and Monitoring Plan. Dependent upon water quality and environmental conditions, a pre-monitoring start-up period of up to 3 months may occur prior to the initiation of the 12-month monitoring period. Biohabitats' operation and monitoring of the ATSTTM Mobile Pilot Unit shall include the following:

1. Biohabitats, Inc. will visit the site on as-needed bases during the pre-monitoring start-up period, and at least once weekly during the course of the 12-month monitoring period. Services provided by Biohabitats , Inc. shall include the following:
 - a. algal biomass recovery,
 - b. quantification of the recovered biomass,
 - c. preparation of plant samples for shipment to designated independent laboratory or third party researchers,
 - d. disposition of the recovered algal biomass,
 - e. field sampling for water pH, dissolved oxygen, conductivity and temperature,
 - f. monitoring of air temperature and rainfall amounts,
 - g. equipment maintenance,
 - h. utility costs,
 - i. qualitative assessment of the algal biomass,
 - j. flow monitoring, both intake and discharge,
 - k. documentation of all of the above services, and
 - l. developing and implementing adjustments to the ATSTTM Mobile Pilot Unit as required.

2. Influent and effluent sampling will be performed using two time-interval automated samplers. Samples will be collected and transported to a state-certified, independent laboratory for analyses and reporting.
3. Biohabitats, Inc. will conduct a direct assessment of specific techniques and approaches to maximize nitrogen and phosphorus removal efficiency during the pilot study.
4. Schedule one time split-sample study with the City of Durham for quality assurance.
5. Produce quarterly data and performance summary to the City's Project Manager in an electronic format. Performance summary should include the compilation and analyses of the data associated with the prior operational period and for which laboratory data have been received.
6. Hold quarterly meetings scheduled in conjunction with the submittal of the performance summary.

Deliverables:

1. Quarterly data and performance summaries, and
2. Quarterly scheduled meetings and attendance.

Task 6. ATSTTM Mobile Pilot System Demobilization

Biohabitats, Inc. will make sure that at the end of the operating period, the ATSTTM Mobile Pilot Unit equipment and structures are removed from the site, including pumps, piping, inlet and outlet structures, liners, samplers, etc. The site will be stabilized, as needed, and returned to its original condition.

Deliverables:

1. Removal of all ATSTTM Mobile Pilot Unit equipment, including supporting equipment and return of the site to its original condition.

Task 7. ATSTTM Pilot Study Final Report

Biohabitats, Inc. will prepare a well written final report that will be submitted for review to the City of Durham. The final project report shall include:

1. A complete compilation and analysis of performance data for the pilot project,
2. Adjustments, if determined by analyses, to the system design, system performance and harvesting/composting projections for a conceptual full-scale ATSTTM system.
3. Modified Algal Turf Scrubber Design Model (ATSTTM DEM) runs designed by Contractor's subcontractor HydroMentia, Inc., and
4. Present the ATSTTM DEM, with the report, at a review meeting with the City of Durham.

Deliverables:

1. Pilot Study Final Report, draft and final documents that have been internally reviewed by Biohabitats, Inc. technical writing specialist, and
2. Schedule and conduct a final meeting with the City of Durham.